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HIGH VOLTAGE MOS DEVICES WITH HIGH GATED-DIODE BREAKDOWN VOLTAGE AND PUNCH-THROUGH VOLTAGE

ABSTRACT OF THE DISCLOSURE

A method of fabricating CMOS devices suitable for high voltage and low voltage applications, while maintaining minimum channel lengths for the devices. In one embodiment, pocket implants (310) are formed in a minimum channel device causing a reverse channel effect. The reverse channel effect is optimized for the minimum channel length of the device. Field implants (120), enhancement implants (130), and wells (140) are all formed using a single mask.